Abstract

A carcass ply (3) is formed by laying on a toroidal support (11) a first and a second series of strip-like segments (13, 14) cut to measure from a continuous strip-like element (2a) and each comprising longitudinal filiform element (15) incorporated in a layer of elastomeric material (18). The segments (13) of the first series are laid sequentially at a certain circumferential distance from each other, to form lateral portions (19) on whose terminal edges (19a) are applied primary portions (4a) of respective reinforcing structures (4) to the beads comprising each a first and a second annular insert (23, 24). The segments of the second series (14) are interposed each in the space defined between two segments of the first series (13), with respective terminal edges (20a) superposed to the primary portions (4a) of the annular structures (4). A third annular insert (26) is applied against the terminal edges of the segments (14) belonging to the second series to enclose said terminal portions against the second insert (24). An auxiliary filling body (27), extending radially away from said third annular insert, is also formed.